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**Sato et al.**

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(54) **NEW GUINEA *IMPATIENS* PLANT NAMED  
‘SAKIMP039’**

(50) Latin Name: *Impatiens*×*hybrida* hort  
Varietal Denomination: **SAKIMP039**

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(57) **ABSTRACT**

An *Impatiens* plant particularly distinguished by having red  
flowers with red-purple eyes, and a compact plant habit, is  
disclosed.

**2 Drawing Sheets**

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Genus and species: *Impatiens*×*hybrida* hort.  
Variety denomination: ‘SAKIMP039’.

#### BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct vari-  
ety of New Guinea *impatiens* plant, botanically known as  
*Impatiens*×*hybrida* hort, and referred to by the variety name  
‘SAKIMP039’. ‘SAKIMP039’ originated from an interspe-  
cific hybridization in Misato, Japan between the proprietary  
female *Impatiens* line ‘NH-248-13H’ (unpatented) and the  
proprietary male *Impatiens* line ‘NH-312-36KH’ (un-  
patented).

In June 2011, the parental lines were crossed and a  
population of F1 plants was created. The F1 plants were  
evaluated in Misato, Japan in an open-field trial. The criteria  
for plant selection included deep flower color and vigorous  
rooting. At the completion of the trial, one single plant  
selection designated ‘M2013-191’ was made based on the  
above criteria and vegetatively propagated. From June to  
August 2013, the selection was evaluated in an open-field in  
Misato, Japan. Shoot-tip cuttings of the variety were then  
shipped to Salinas, Calif., where the plants were regenerated  
and re-evaluated for stability of traits. The selection, sub-  
sequently named ‘SAKIMP039’, was found to reproduce  
true to type in successive generations of asexual propagation  
via shoot-tip cuttings in Salinas, Calif.

#### SUMMARY

The following are the most outstanding and distinguish-  
ing characteristics of this new variety when grown under  
normal horticultural practices in Salinas, Calif.

1. Red flowers with red-purple eyes; and
2. A compact plant habit.

#### DESCRIPTION OF THE PHOTOGRAPHS

This *impatiens* plant is illustrated by the accompanying  
photographs which show the plant’s overall plant habit

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including form, foliage, and flowers. The photographs are of  
a plant grown in Salinas, Calif. under greenhouse condi-  
tions. The colors shown are as true as can be reasonably  
obtained by conventional photographic procedures.

FIG. 1 shows the overall plant habit of the plant grown in  
a pot.

FIG. 2 shows a close-up of the mature inflorescence of the  
plant.

#### DESCRIPTION OF THE NEW VARIETY

The following detailed descriptions set forth the distinc-  
tive characteristics of ‘SAKIMP039’. Color references are  
to The Royal Horticultural Society of London Colour Chart  
(R.H.S.), 4<sup>th</sup> edition (2001). Data was collected from plants  
grown about 7 months from propagation by terminal cut-  
tings in Salinas, Calif. under greenhouse conditions. Ana-  
tomic labels are from *The Cambridge Illustrated Glossary of  
Botanical Terms*, by M. Hickey and C. King, Cambridge  
University Press.

#### Classification:

*Family*.—Balsaminaceae.

*Botanical*.—*Impatiens*×*hybrida* hort.

*Common*.—*Impatiens*.

*Designation*.—‘SAKIMP039’.

#### Growth:

*Environmental conditions for plant growth*.—The ter-  
minal 1.0 to 1.5 inches of an actively growing stem  
was excised. The vegetative cuttings were propa-  
gated for five to six weeks. The base of the cuttings  
were dipped for 1 to 2 seconds in a 1:9 solution of  
DIP ’N GROW (1 solution: 9 water) root inducing  
solution immediately prior to sticking into the cell  
trays. Cuttings were stuck into plastic cell trays  
having 98 cells, and containing a moistened peat  
moss-based growing medium. The cuttings were  
misted with water from overhead for 10 seconds  
every 30 minutes until sufficient roots were formed.



Rooted cuttings were transplanted and grown in 20 cm diameter plastic pots in a glass greenhouse located in Salinas, Calif. Pots contained a peat moss-based growing medium. Soluble fertilizer containing 20% nitrogen, 10% phosphorus and 20% potassium was applied once a day or every other day by overhead irrigation. Pots were top-dressed with a dry, slow release fertilizer containing 20% nitrogen, 10% phosphorus and 18% potassium. The typical average air temperature was 24° C.

## Parentage:

*Female parent.*—The proprietary *Impatiens* variety ‘NH-248-13H’.

*Male parent.*—The proprietary *Impatiens* variety ‘NH-312-36KH’.

## Plant:

*Habit.*—Compact.

*Height.*—29.0 cm from the soil line to the top of the foliage.

*Spread.*—44.0 cm.

*Number of branches per plant.*—14 total with 8 main branches.

*Length of branches.*—2.0 cm from the soil line to the first node, 10.0 cm total.

*Diameter of branches.*—2.5 cm for the main branch, 1.0 cm to 1.5 cm for the other secondary branches.

*Color of the branches.*—RHS 59A (Red-purple) with slight RHS 144B (Yellow-green).

*Life cycle.*—Annual.

*Time to produce a rooted cutting.*—About 4 weeks.

*Time to bloom from propagation.*—6 to 8 weeks.

*Flowering requirements.*—Will flower so long as the temperature is above 5° C.

*Temperature tolerances.*—Plants observed to continue flowering in a temperature range of 5° C. to 36° C.

## Stems:

*Color.*—RHS 59A (Red-purple) with slight RHS 144B (Yellow-green).

*Anthocyanin color.*—RHS 59A (Red-purple).

*Pubescence.*—Absent.

*Description.*—Strong; circular in cross-section, smooth and shiny.

*Length.*—5.0 cm to 8.0 cm from the first to the second node; 10.0 cm to 11.0 cm total.

*Diameter.*—5.0 mm to 6.0 mm.

*Internode length.*—5.0 cm; 3.5 cm to 5.0 cm from the first node to the second node.

## Leaves:

*Arrangement.*—Whorled with up to 5 leaves per node; opposite if only two leaves at one node.

*Shape.*—Lanceolate, curled.

*Apex.*—Acuminate.

*Base.*—Shortly attenuate.

*Margin.*—Serrate.

*Surface appearance.*—Dull and waxy.

*Length.*—6.5 cm.

*Width.*—2.3 cm.

*Color.*—Upper surface: RHS 139A (Yellow-green). Lower surface: RHS 138A (Green).

*Variation.*—Absent.

*Fragrance.*—Absent.

*Surface texture.*—No pubescence.

*Petiole.*—Length: 8.0 mm. Diameter: 3.0 mm. Color: Closest to RHS 145D (Yellow-green). Surface texture: Smooth, glabrous.

*Venation pattern.*—Pinnate.

*Venation color (both upper and lower surfaces).*—Closest to RHS 145C (Yellow-green).

## Flowers:

*Number of flowers per node.*—1 to 3 in bloom at one time; about 10 flower buds.

*Number of flower buds per plant.*—Approximately 50 to 60 in bloom.

*Lastingness of individual blooms on the plant.*—14 days.

*Flower type.*—Single with spur.

*Fragrance.*—Absent.

## Corolla:

*Shape.*—Roughly circular with 5 radial petals.

*Diameter.*—5.0 cm.

*Depth.*—1.0 cm.

*Petals.*—Surface texture (both surfaces): Glabrous.

Length: 2.7 cm. Width: 2.2 cm. Shape: Obcordate.

Apex: Emarginate (cleaved). Margin: Entire. Base:

Attenuate. Color: Upper surface: Closest to RHS

46A (Red). Lower surface: Closest to but brighter

than RHS 63A (Red-purple). Eye zone: RHS 61A

(Red-purple).

## Calyx:

*Sepal shape.*—Lanceolate.

*Sepal number per flower.*—2.

*Sepal color.*—Upper surface: RHS 60A (Red-purple) with slight RHS 144B (Yellow-green) at the tip.

Lower surface: RHS 60A (Red-purple) with slight

RHS 142D (Yellow-green).

*Sepal length.*—1.0 cm.

*Sepal diameter.*—4.0 mm.

*Sepal base.*—Subcordate.

*Sepal apex.*—Caudate.

*Sepal margin.*—Entire.

*Sepal texture (both surfaces).*—Glabrous.

## Bud:

*Surface texture.*—Glabrous.

*Length.*—1.6 cm.

*Diameter.*—1.0 cm.

*Shape.*—Deltoid longitudinal cross-section.

*Color.*—Closest to but brighter than RHS 60A (Red-purple).

## Peduncle:

*Length.*—2.5 cm.

*Diameter.*—1.0 mm to 1.5 mm.

*Color.*—RHS 60A (Red-purple) with slight RHS 144C (Yellow-green).

*Surface texture.*—Smooth, glabrous.

## Spur:

*Color.*—RHS 58A (Red-purple).

*Shape.*—Tubular; curved downward.

*Length.*—1.0 mm to 2.0 mm.

*Diameter.*—1.0 mm to 2.0 mm.

## Reproductive organs:

*Stamen form.*—Fused; split into 4 lobes.

*Stamen number.*—5.

*Filament form.*—Free.

*Anther length.*—4.0 mm.

*Anther color.*—Closest to RHS 60A (Red-purple).

*Pistil number.*—1.

*Stigma color.*—RHS 59A (Red-purple).

*Style color.*—RHS 144A (Yellow-green).

*Ovary arrangement.*—Parietal.

*Ovary surface color.*—Closest to RHS 145B (Yellow-green).

*Pollen amount.*—Abundant.  
*Pollen description.*—Powdery.  
*Seed production.*—Not observed.  
 Disease and insect resistance: No particular resistance or susceptibility observed.

COMPARISON WITH PARENTAL LINES AND COMMERCIAL VARIETY

'SAKIMP039' is distinguished from its parents as shown in Table 1 below:

TABLE 1

Comparison with Parental Lines			
Characteristic	'SAKIMP039'	Female Parent 'NH-248-1311'	Male Parent 'NH-312-36M1'
Flower color	Red with Red-purple eyes	Orange	Dark red
Plant growth habit	Compact	Compact	Vigorous

When 'SAKIMP039' compared to the commercial *Impatiens* variety 'SAKIMP030' (U.S. Plant Pat. No. 25,015), the following differences as described in Table 2 below.

TABLE 2

Comparison with Similar Variety		
Characteristic	'SAKIMP039'	'SAKIMP030'
Petal color, upper surface	Closest to RHS 46A (Red)	Closest to but darker than RHS 45A (Red)
Spur color	Closest to but brighter than RHS 58A (Red-purple)	RHS 61B (Red-purple)
Mature leaf color, upper surface	RHS 139A (Yellow-green)	Darker than RHS 147A (Yellow-green)

We claim:

1. A new and distinct variety of New Guinea *Impatiens* plant named 'SAKIMP039' as described and illustrated herein.

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FIG. 1





FIG. 2